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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,650	08/15/2001	Debi Mishra	MS1-927US	2837
22801	7590	09/08/2005	EXAMINER	
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			HO, ANDY	
			ART UNIT	PAPER NUMBER
			2194	

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/931,650

Applicant(s)

MISHRA ET AL.

Examiner

Andy Ho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-12 and 15-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-12 and 15-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/12/2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This action is in response to the amendment filed 6/16/2005.
2. Claims 1-3, 5-12 and 15-24 have been examined and are pending in the application.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claim language in the following claim is not clearly understood:

As per claim 15, it is unclear whether "the framework" (line 1) refers to the bytecode framework or the intermediate language code framework of claim 12. Correction is required.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5-12 and 15-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desrochers U.S Patent No. 6,553,405 in view of Helgeson U.S Pub. No. 2002/0073236, and further in view of Admitted Prior Arts (APA).

**As to claim 1**, Desrochers teaches a method comprising receiving an initial code associated with a first system (web browser receiving byte code from the web server, lines 29-58 column 4), the initial code including a reference to a referenced class (the main Java class holds references to the other classes, lines 39-40 column 4);

converting the initial code to a converted code (the Web browser converts the byte code into the requested Java classes usable by the applet, lines 6-8 column 5) capable of execution on a second system (web browser hosting applets and providing them with an execution environment, lines 28-30 column 2);

executing the converted code on the second system (applets being executed on the web browser, lines 38-55 column 2);

detecting a need for the referenced class during execution of the converted code on the second system (a typical applet running in the execution environment of the Web browser might require at some point in its life to load a new Java class in order to continue its normal operation, lines 38-41 column 2);

loading the referenced class into memory accessible by the second system (the browser includes an integrated class loader which then converts the byte code stream into a Java class directly usable by the applet, lines 50-55 column 2).

Desrochers does not explicitly teach the first system is a bytecode framework and the second system is an intermediate language code framework.

Helgeson teaches (paragraph 0011 page 1 to paragraph 0017 page 2) the advantages of a network system wherein data communication between two systems is being done when the two systems are being implemented in two different frameworks. The system allows data objects from a first framework to be imported to a second framework wherein the data objects from the first framework is being translated so it could be executable on the second framework. It would have been obvious to apply the teachings of Helgeson to the system of Desrochers because this allows data object communication between two different frameworks as disclosed by Helgeson.

Both Desrochers reference (lines 39-40 column 4) and Helgeson reference (paragraph 0011 page 1) disclose the frameworks are implemented in object-oriented programming. However, these references do not teach the frameworks are bytecode and intermediate language code frameworks. APA teaches (15-23 page 2) bytecode and intermediate language code frameworks are well known object-oriented frameworks. It would have been obvious to apply the teachings of APA to the system of Desrochers as modified because such teaching is well known in the art. The system of Desrochers as modified by Helgeson and APA would include data communication between a bytecode framework and an intermediate language code framework.

**As to claim 2**, Desrochers as modified further teaches the initial code comprises an applet (load the main Java class of the applet, line 39 column 4).

**As to claim 3**, Desrochers as modified further teaches creating a reference type for the referenced class (package named se.ericsson.xxx and se.ericsson.lidap, lines 51-53 column 4).

**As to claim 5**, Desrochers as modified further teaches converting the referenced class code to a converted class code (the Web browser converts the byte code into the requested Java classes usable by the applet, lines 6-8 column 5) capable of execution on the intermediate language code framework (web browser hosting applets and providing them with an execution environment, lines 28-30 column 2).

**As to claim 6**, Desrochers as modified further teaches executing the converted referenced class code on the intermediate language code framework (applets being executed on the web browser, lines 38-55 column 2).

**As to claim 7**, it is a computer readable medium claim of claim 1. Therefore, it is rejected for the same reasons as claim 1 above.

**As to claim 8**, it is a method claim of claims 1 and 4-5. Therefore, it is rejected for the same reasons as claims 1 and 4-5 above.

**As to claims 9-11**, they are method claims of claims 2, 6 and 3, respectively. Therefore, they are rejected for the same reasons as claims 2, 6 and 3 above.

**As to claim 12**, Desrochers teaches a user system (user system 12, Fig. 1) comprising:

- an applet class loader (integrated applet class loader, lines 50-53 column 2);
- a converter (converts, line 51 column 2);
- a first system (applets being executed on the web browser, lines 38-55 column 2), wherein the converter converts code (the Web browser converts the byte code into the requested Java classes usable by the applet, lines 6-8 column 5) associated with second system (web server, lines 29-58 column 4) to a converted code capable of

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execution on the first system (applets being executed on the web browser, lines 38-55 column 2).

Desrochers does not explicitly the systems are bytecode and intermediate language code frameworks.

Helgeson teaches (paragraph 0011 page 1 to paragraph 0017 page 2) the advantages of a network system wherein data communication between two systems is being done when the two systems are being implemented in two different frameworks. The system allows data objects from a first framework to be imported to a second framework wherein the data objects from the first framework is being translated so it could be executable on the second framework. It would have been obvious to apply the teachings of Helgeson to the system of Desrochers because this allows data object communication between two different frameworks as disclosed by Helgeson.

Both Desrochers reference (lines 39-40 column 4) and Helgeson reference (paragraph 0011 page 1) disclose the frameworks are implemented in object-oriented programming. However, these references do not teach the frameworks are bytecode and intermediate language code frameworks. APA teaches (15-23 page 2) bytecode and intermediate language code frameworks are well known object-oriented frameworks. It would have been obvious to apply the teachings of APA to the system of Desrochers as modified because such teaching is well known in the art. The system of Desrochers as modified by Helgeson and APA would include data communication between a bytecode framework and an intermediate language code framework.

**As to claim 15**, Desrochers as modified further teaches a runtime engine (applet running within the web browser, lines 38-41 column 2).

**As to claim 16**, Desrochers as modified further teaches the intermediate language code framework comprises an application domain (web browser, line 39 column 2; software application programs running on one machine, lines 9-10 column 1).

**As to claim 17**, Desrochers as modified further teaches the intermediate language code framework comprises a dynamic assembly (the applet requires additional Java classes at that time or on a per-demand basis during the full life of the applet, lines 9-12 column 5).

**As to claim 18**, it is a system claim of claim 1. Therefore, it is rejected for the same reasons as claim 1 above.

**As to claims 19-21**, they are system claims of claims 1, 12 and 15, respectively. Therefore, they are rejected for the same reasons as claims 1, 12 and 15 above.

**As to claim 22**, Desrochers further teaches a browser (web browser, line 39 column 2).

**As to claim 23**, it is a system claim of claim 2. Therefore, it is rejected for the same reasons as claim 2 above.

**As to claim 24**, it is a method claim of claims 1-2. Therefore, it is rejected for the same reasons as claims 1-2 above.

### ***Response to Arguments***



5. Applicant's arguments filed 6/16/2005 have been fully considered but are moot in view of the new ground(s) rejection.

Applicant's arguments presented issues which required the Examiner to further view the previous rejection. The Examiner conducted a further search regarding the issues mentioned in Applicant's response. Therefore, all arguments regarding the cited references of the previous rejection are moot in view of the new grounds of rejection.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy Ho whose telephone number is (571) 272-3762. A voice mail service is also available for this number. The examiner can normally be reached on Monday – Friday, 8:30 am – 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIM) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Any response to this action should be mailed to:

Commissioner for Patents


P.O Box 1450

Alexandria, VA 22313-1450

Or fax to:

- AFTER-FINAL faxes must be signed and sent to (571) 273 - 8300.
- OFFICAL faxes must be signed and sent to (571) 273 - 8300.
- NON OFFICAL faxes should not be signed, please send to (571) 273 – 3762

A.H  
September 2, 2005

  
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